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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,829	11/20/2003	Meredith J. Ringel	MERL-1506	8583

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Patent Department
Mitsubishi Electric Research Laboratories, Inc.
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ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/717,829	RINGEL ET AL.
	Examiner	Art Unit	
	Stephen G. Sherman	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 September 2006</u>.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-23</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-23</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>20 November 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the amendment filed the 29 September 2006.

Claims 1-23 are pending.

Response to Arguments

2.   Applicant's arguments filed the 29 September 2006 have been fully considered

but they are not persuasive.

Beginning on page 2 of the amendment the applicant argues the Geaghan

reference used in the rejection of claim 1. Specifically, the applicant argues on page 3,

fourth and fifth paragraphs that Geaghan describes a method for discriminating single

touch events on a touch surface from multiple touch events on the touch sensitive

surface using a total measured current. Then on page 5, last paragraph the applicant

states that Geaghan does not determine a plurality of sequences of samples when a

plurality of users touch the touch sensitive surface, and that Geaghan does not teach

means for generating a plurality of sequences of touch samples when a plurality of

users simultaneously touch the touch sensitive surface. The applicant continues the

argument on page 6, third paragraph, in that the system of Dietz does far more than

merely differentiating between single touch events and multiple touch events on a touch

sensitive surface, and that nowhere in Geaghan is described each sequence of touch

samples identified with a particular user generating the sequence of touch samples. On

page 9, the applicant argues that the term conflict, as used in the current applicant, is more complex than merely distinguishing when multiple touch events are occurring simultaneously, and that the "phantom" touch is an error not a conflict. The applicant then alleges that the examiner has misunderstood the claimed invention. The examiner respectfully disagrees.

First of all, the examiner fully recognizes the difference between the applicant's **invention** and the Geaghan reference, however, the applicants *claimed* **invention** is still anticipated by the Geaghan reference. Nowhere in claim 1 does the claim state that the plurality of sequences of touch samples are determined at the *same time*, therefore Geaghan discloses of generating a plurality of sequences at *different times*. The sequences are identifiable with the users generating the samples because as explained in the rejection, the samples are subtracted out to determine the multiple touches, such that multiple user touches can be determined. The applicant's **invention** may be that a sequence is determined for each individual user touching the screen at the same time, however, **as claimed**, the invention only requires that each of the sequence of samples can be identified with a particular user and since the system of Geaghan can do so, it anticipates the claimed invention. With respect to the applicant's argument of the conflict, the examiner would like to reiterate that the word "conflict" in the claims is not defined as to what the conflict is. Nowhere in claim 1 does it state that the term "conflict" denotes "*incompatible commands made by multiple users to an application running on the system including a touch sensitive display surface*" as alleged by the applicant. Therefore, as stated in the rejection, the conflict resolved by Geaghan is

when two users touch the device at the same time. **The applicant is reminded that the specification is not the measure of invention. Therefore, limitations contained therein cannot be read into the claims for the purpose of avoiding the prior art.** *In re Sporck, 55 CCPA 743, 386 F 2d 924, 155 USPQ 687 (1968).*

With respect to the arguments of claims 3, 4, 19 and 23, the main argument against these rejections is that Geaghan does not anticipate claim 1, however, as explained above Geaghan does anticipate claim 1, therefore the rejections for claims 3, 4, 19 and 23 are maintained.

With respect to claims 2, 5, 7-18 and 20-22, the applicant merely recites MPEP 707.07(d) and states that the rejection fails not only to provide a reasonable rationale as to how the applied art can be construed to teach every feature in the rejected claims and that the rejection also fails to even consider explicitly claimed features of the invention as recited in claims. The applicant is reminded that Rule 37 CFR 1.111(b) requires that the applicant MUST "distinctly and specifically point out errors" in the examiner's action. Also, arguments or conclusions of the attorney cannot take place of evidence. The applicant did not provide any specific argument for the individual claims, as an example claim 7, as to why it is not obvious that something is considered "global" when it affects something as a whole or as in claim 8, why it is not obvious that something is "element" when the conflict affects a particular item. *See In re Cole, 51 CCPA 919,326 F 2d 769, 140 USPQ 230 (1964); In re Schulze, 52 CCPA 1422, 346 F 2d 600, 145 USPQ 716 (1965); Meitzner v. Mindick, 549 F 2d 775, 193 USPQ 17 (CCPA 1977).*

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

4.   Claims 1, 3-4, 19 and 23 are rejected under 35 U.S.C. 102(e) as being

anticipated by Geaghan et al. (US 2003/0063073).

Regarding claim 1, Geaghan et al. discloses a graphic multi-user interface for

resolving conflicts, comprising:

a touch sensitive surface (Figure 4, touch surface 11);

means for displaying a plurality of items on the touch sensitive surface (Figure 5

and paragraph [0068].);

means for generating a plurality of sequences of touch samples when a plurality

of users simultaneously touch the touch sensitive surface, each sequence of samples

being identified with a particular user generating the sequence of samples (Figure 1 and

Paragraphs [0047]-[0052] explain that a first and second sequence of signals are

generated for first and second touches and when the touches overlap, i.e. occur at the

same time, the signals can be subtracted to determine the location of each of the

touches, therefore associating the touch with one of the users.);

means for associating each sequence of samples with a particular item, the

particular item having an associated state and a policy (Figure 5 shows different touch

buttons 67 and 68 which the users can touch, and the signals generated by touching the

screen would be associated with one of the buttons. The buttons would have a state of

being located at a position on the touch panel and a policy of being pressed or

unpressed.);

generating an event for each associated sequence of samples (Paragraph [0052]

explains that the touch location can be determined for each set of signals resulting from

a touch, and if an area of the screen as in Figure 5 is touched the event for that set of

signals will take place.); and

means for determining a decision with respect to a conflict affecting a next state

of the particular item according to the events from the plurality of users, the state and

the policy (Figures 1 and 5 and Paragraphs [0047]-[0052] explain that a conflict occurs

when two users touch the screen at the same time and that the touch can be seen to

happen intermediate of the two locations, but by subtracting the signals form each other

the conflict can be avoided and each individual touch location can be determined even

when multiple users use the table.).

Regarding claim 3, Geaghan et al. discloses the graphic multi-user interface of

claim 1, in which the particular item is active when a particular user is touching the

particular item (Figure 5. items 67 and 68 would be active if a user pressed them.).

Regarding claim 4, Geaghan et al. discloses the graphic multi-user interface of

claim 1, in which one particular user generates multiple sequences of sample for

multiple touches (Paragraph [0037]).

Regarding claim 19, Geaghan et al. discloses the graphic multi-user interface of

claim 1, in which the decision is based on a signal intensity of the events (Figure 2 and

paragraph [0053] explain that the conflict of overlapping touches is overcome based on

the intensity, i.e. rate of change, of the signal.).

Regarding claim 23, this claim is rejected under the same rationale as claim 1.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

7.   Claims 2, 5-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Geaghan et al. (US 2003/0063073).

Regarding claim 2, Geaghan et al. discloses the graphic multi-user interface of

claim 1.

Geaghan et al. fail to teach that the state of the item includes an owner, an

access code, a size, an orientation, a color and a display location.

However, it would have been obvious to "one of ordinary skill" in the art at the

time the invention was made that the state of the item includes an owner, an access

code, a size, an orientation, a color and a display location in order to provide for the

usability of the touchable icons on the touch panel.

Regarding claim 5, Geaghan et al. discloses the graphic multi-user interface of

claim 1.

Geaghan et al. fail to teach that each sample includes a user ID, a time, a

location, an area and a signal intensity of the touch.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that each sample includes a user ID, a time, a location, an area and a signal intensity of the touch in order for the system to identify which user touched the panel and at what point the touch panel was touched.

Regarding claim 6, Geaghan et al. discloses the graphic multi-user interface of claim 5, in which each sample includes a speed and trajectory of the touch (Figure 2 and paragraph [0053], the rate of change is the speed and trajectory of the touch.).

Regarding claim 7, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the policy is global when the conflicts affects an application as a whole.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the policy is global when the conflicts affects an application as a whole since global is a term used to encompass all of something.

Regarding claim 8, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the policy is element when the conflicts affects a particular item.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the policy is element when the conflicts affects a particular item since element is a term that relates to a singular object.

Regarding claim 9, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the policy is privileged user depending on privilege levels of the plurality of users.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the policy is privileged user depending on privilege levels of the plurality of users since the privilege level of the user would be determining that access to the application/item.

Regarding claim 10, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that each user has an associated rank and the decision is based on the ranks of the plurality of users.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that each user has an associated rank and the decision is based on the ranks of the plurality of users because this would allow users with more authority, such as a boss at a meeting, to have more control over items then his employees.

Regarding claim 11, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the policy is based on a votes made by the plurality of users.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the policy is based on a votes made by the plurality of users because determining an action to occur is often times voted on by people to determine what is to be done.

Regarding claim 12, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the policy is release, and the decision is based on a last user touching the particular item.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the policy is release, and the decision is based on a last user touching the particular item because this would indicate that the other users have let go of the item and have relinquished control over to the user touching the item last.

Regarding claim 13, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the decision is based on an orientation of the particular item.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the decision is based on an orientation of the particular item because the orientation would indicate which user the item is pointing towards.

Regarding claim 14, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the decision is based on a location of the particular item.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the decision is based on a location of the particular item because if an item is closer to one user then another it would mean that the particular user would have more of a right to the object.

Regarding claim 15, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the decision is based on a size of the particular item.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the decision is based on a size of the particular item

because a size would indicate whether the item is meant to be viewed by all people using the touch device or whether only one user is meant to view the item.

Regarding claim 16, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the graphic multi-user interface further comprises means for displaying an explanatory message related to the decision.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the graphic multi-user interface further comprises means for displaying an explanatory message related to the decision in order to allow all of the users the ability to know what has occurred with respect to the item in question.

Regarding claim 17, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the decision is based on a speed of the events.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the decision is based on a speed of the events because the speed would indicate how fast the touch panel was touched therefore determining which user was fasted to touch a particular item.

Regarding claim 18, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the decision is based on an area of the events.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the decision is based on an area of the events because if an item is in an area closer to one user than another that user would have more of a right to the object.

Regarding claim 20, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the decision tears the particular item into multiple parts.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the decision tears the particular item into multiple parts because this would allow for a life-like feel to the touch panel since a document tearing in half would occur if the event took place with a real document.

Regarding claim 21, Geaghan et al. discloses the graphic multi-user interface of claim 1.

Geaghan et al. fail to teach that the decision duplicates the particular item.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made that the decision duplicates the particular item because

this would allow for multiple users to view the same item at the same time without

conflict.

Regarding claim 22, Geaghan et al. discloses the graphic multi-user interface of

claim 7.

Geaghan et al. fail to teach that the application has a global state, and further

comprising: allowing a change to the global state only if all times are inactive, no users

are touching the touch sensitive surface or any of the plurality of items.

However, it would have been obvious to "one of ordinary skill" in the art at the

time the invention was made that the application has a global state, and further

comprising: allowing a change to the global state only if all times are inactive, no users

are touching the touch sensitive surface or any of the plurality of items because a global

state would effect the entire system and if the system is being used the system cannot

be changed so the change would need to occur when all of the users are not touching

the panel.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

25 October 2006

AMR A. AWAD
SUPERVISORY PATENT EXAMINER